#### CLAIMS:

1. A polyimide resin comprising recurring units of the following structural formulae (1) and (2) and prepared using a diamine bearing an aromatic ring having an amino radical attached thereto and another aromatic ring having a phenolic hydroxyl radical so that the polyimide resin has phenolic hydroxyl radicals in its skeleton,

$$\begin{bmatrix}
O & O \\
N & X
\end{bmatrix}_{m}$$

$$\begin{bmatrix}
O & O \\
N & X
\end{bmatrix}_{n}$$

$$\begin{bmatrix}
O & O \\
N & X
\end{bmatrix}_{n}$$

$$\begin{bmatrix}
O & O \\
N & X
\end{bmatrix}_{n}$$

$$(1)$$

$$(2)$$

wherein X is at least one tetravalent organic radical selected from the group [I]; Y is a divalent organic radical comprising a diamine residue Y₁ having a phenolic hydroxyl radical represented by the formula [II] and an aromatic diamine residue Y₂ selected from the group [III]; Z is a siloxane diamine residue represented by the formula [IV]; Y₁/(Y₁+Y₂) being from 0.01 to 1 in a molar ratio, m and n are natural numbers, satisfying 0.1 ≤ m/(m+n) ≤ 0.99 and 10 ≤ m+n ≤ 500,

### Group (I)

wherein R is independently a hydrogen atom, halogen atom or substituted or unsubstituted monovalent hydrocarbon radical of 1 to 8 carbon atoms,

# Formula (II)

$$\begin{array}{c|c}
\hline
 & | \\
\hline$$

wherein A is a radical selected from the group [IIa] and B is a radical selected from the group [IIb]:

## Group (IIa)

$$-\frac{R}{C} - O - S - \frac{1}{\text{single}}$$

$$-\frac{R}{R} - \frac{O}{S} - \frac{R}{S} - \frac{R}{R} - \frac{R}{R$$

## Group (IIb)

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R is as defined above, and k is a natural number of 1 to 5,

### Group (III)

wherein R is as defined above,

### Formula (IV)

$$-R^{1}-\overset{R^{2}}{\underset{R}{\overset{1}{\text{Ni}}}}-\left(\overset{R^{2}}{\underset{R^{2}}{\overset{1}{\text{O}}}}-R^{1}-\overset{R^{2}}{\underset{R^{2}}{\overset{1}{\text{O}}}}\right)$$

- wherein  $R^1$  is independently a  $C_{1-8}$  alkylene or arylene radical,  $R^2$  is independently a  $C_{1-8}$  alkyl, alkoxy or aryl radical, and j is an integer of 4 to 60.
- 2. A method for preparing the polyimide resin of claim 1, comprising reacting a tetracarboxylic acid dianhydride having the general formula (3):

or its precursor, a tetracarboxylic acid or ester derivative thereof with diamines having the general formulae (4), (5) and (6):

 $H_2N-Y_1-NH_2$  (4),  $H_2N-Y_2-NH_2$  (5),  $H_2N-Z-NH_2$  (6),

- wherein X,  $Y_1$ ,  $Y_2$  and Z are as defined above, with the proviso that the amounts of diamines of formulae (4), (5) and (6) used are  $y_1$  moles,  $y_2$  moles and z moles, respectively,  $y_1/(y_1+y_2)$  is from 0.01 to 1, and  $(y_1+y_2)/(y_1+y_2+z)$  is from 0.1 to 0.99,
- under such conditions as to give a molar ratio of P/Q > 1
  wherein P is the amino radical on the diamine of formula (4)
  and Q is the acid anhydride residue (or 2 equivalents of
  carboxylic acid radical or ester radical) on the
  tetracarboxylic acid dianhydride of formula (3).

3. A polyimide resin composition comprising the polyimide resin of claim 1.

- 4. The polyimide resin composition of claim 3, further comprising an epoxy resin having at least two glycidyl radicals.
  - 5. The polyimide resin composition of claim 4, further comprising an epoxy resin curing agent.

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